

132110

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10-14-02 TC**IN THE SPECIFICATION:**

Page 8, line 1: Delete "could", and substitute therefor  
--could--;

OR simply insert an underline under the word "could" that is  
presently in line 1, of page 8.

**IN THE CLAIMS:**

Please cancel claims 3, 4, 5, 6, 9, 10, 11, 13 and 14 without  
prejudice, and amend the remaining claims 1, 2, 7, 8 and 12 as  
follows, the added words being underlined and the deleted words  
being within brackets:

- 1 1. (Amended) A method for processing a digitally encoded multimedia  
2 stream of data that is in packets including processing prior  
3 to transmission, multiplexing, and splicing to prevent  
4 underflow of a decoder buffer of a predetermined size, each  
5 frame having a presentation time stamp and a decoding time  
6 stamp, said method comprising the steps of:
  - 7 a) determining, prior to transmission of a data stream, a  
8 potential data underflow for said decoder buffer by a process  
9 of emulation when said decoder buffer is less than said  
10 predetermined size;
  - 11 b) adding a predetermined value to said presentation time  
12 stamp when said potential data underflow is determined in step  
13 a); and

14 c) adding said predetermined value to said decoding time  
15 stamp when said potential data underflow is determined in step  
16 a);

17 whereby a buffer underflow of said decoder buffer is  
18 prevented.

1 2. The method as defined in claim 1 wherein said digitally  
2 encoded multimedia stream of data is an MPEG-2 transport  
3 stream.

1 7. The method of claim 1 wherein said predetermined value added  
2 to said presentation time stamp is an amount T determined by  
3 the relationship:

4 
$$T = (B - x) / [S * (P - H) / P]$$

5 where: B = the size of said decoder buffer;

6 x = the size of said current buffer;

7 S = the bit rate of said transport stream;

8 P = a uniform size of said packets; and

9 H = a minimum header size for each of said packets.

1 8. The method of claim [8] 7 wherein said current buffer level  
2 is x, said packets have a uniform size P and each packet has a  
3 minimum header size H, a maximum number of null packets  
4 deleted is by the relationship:

5 
$$N = (B - x) / (P - H)$$

6 where:  $N$  = a number of packets;

7  $B$  = the size of said decoder buffer;

8  $x$  = the size of said current buffer;

9  $P$  = a uniform size of said packets; and

10  $H$  = a minimum header size for each of said  
11 packets.

1 12. In a method for transmission, multiplexing, and splicing a  
2 digitally encoded transport stream to prevent buffer underflow  
3 of said stream including packets each having a presentation  
4 time stamp and a decoding time stamp, said method being  
5 adapted for use with a decoder buffer of a predetermined size,  
6 said method comprising the steps of:

7 a) determining by a process of emulation, and processing prior  
8 to transmission, multiplexing and splicing said digitally  
9 encoded transport stream, a potential underflow when the  
10 current buffer size is less than said predetermined amount;

11 b) adding a predetermined value to said presentation time  
12 stamp, when a potential underflow is determined in step (a);  
13 and

14 c) adding said predetermined value to said decoding time  
15 stamp, when a potential underflow is determined in step (a);

16 whereby buffer underflow is prevented.